

### **REMARKS**

In view of the following discussion, none of the claims now pending in the application are anticipated or obvious under the provisions of 35 U.S.C. §§ 102 and 103. Thus, all of the claims are now in allowable form.

The Assignee's representative attempted to schedule an Examiner interview with the Examiner to discuss the present rejections. However, no agreeable time could be scheduled. The Examiner is encouraged to contact the Assignee's representative upon reviewing this response should further discussion be helpful in advancing prosecution.

#### **I. REJECTION OF CLAIMS 1, 4-13 AND 15-21 UNDER 35 U.S.C. § 102**

The Examiner has rejected claims 1, 4-13 and 15-21 in the Office Action as being anticipated under 35 U.S.C. § 102 by Aizawa et al. (U.S. Patent No. 6,931,238, issued on August 16, 2005, hereinafter referred to as "Aizawa"). The rejection is respectfully traversed.

Aizawa discloses a radio communication apparatus and antenna control method. A radio section multiplies modulated transmission signals A to D respectively by a carrier with a frequency of  $f_A$ ,  $f_B$ ,  $f_C$  or  $f_D$ , thereby performing the frequency conversion and outputs the signals to a switch. (See Aizawa, Abstract).

The Examiner's attention is directed to the fact that Aizawa fails to describe or to suggest the novel concept of switching between the first and second antennas in response to a predefined schedule of a sequence of scheduled packet bursts, wherein the predefined schedule is scheduled by a base station, or receiving by wireless transceivers scheduled communications from a transceiver at a transmission station in accordance with a predefined schedule of a sequence of scheduled packet bursts, wherein the wireless transceivers are located at receiving stations having switched protocol diversity reception operational modes, wherein the predefined schedule is scheduled by the transmission station and wherein the first packet burst and the second packet burst comprise identical packets of a common message, as positively claimed. Specifically, independent claims 1, 5, 8, and 13 positively recite:

1. A radio receiver comprising:

first and second antennas connected to a radio frequency processing circuitry by a radio frequency switch; and

a radio frequency switch control in communication with the radio frequency switch, the radio frequency switch control for switching between the first and second antennas in response to a predefined schedule of a sequence of scheduled packet bursts, wherein the predefined schedule is scheduled by a base station, wherein the sequence of scheduled packet bursts comprises a first signal burst received via the first antenna and a second signal burst received via the second antenna, wherein the first signal burst and the second signal burst comprise identical packets of a common message. (Emphasis added).

5. A method of maintaining a controlled quality of service in a wireless communication system, comprising:

receiving by wireless transceivers scheduled communications from a transceiver at a transmission station in accordance with a predefined schedule of a sequence of scheduled packet bursts, wherein the wireless transceivers are located at receiving stations having switched protocol diversity reception operational modes, wherein the predefined schedule is scheduled by the transmission station to switch between a first antenna and a second antenna;

enabling the first antenna to receive a first packet burst in accordance with the predefined schedule;

enabling the second antenna to receive a second packet burst in accordance with the predefined schedule, wherein the first packet burst and the second packet burst comprise identical packets of a common message;

recording the received bursts as soft information in a storage medium; and  
processing the soft information from the first and second bursts into a single message. (Emphasis added).

8. A method of achieving a quality of service control in a wireless local area network communication system, comprising:

transmitting a message contained within a plurality of packet bursts occurring at spaced time intervals, wherein a first packet burst and a second packet burst of the plurality of packet bursts comprise identical packets of a common message; and

receiving each of the packet bursts individually at one of a plurality of antennas in accordance with a predefined schedule, where the predefined schedule is scheduled by a base station and is used to select one of the plurality of antennas for receiving each of the packet bursts. (Emphasis added).

13. A communication system for coupling a transmitter and a receiver adapted for receiving a first signal burst and a second signal burst by a first antenna and a second antenna respectively, and responding to the two signal bursts to communicate a single unified message at the receiver; wherein:

the first and second signal bursts are sequentially separated in time in accordance with a predefined schedule, wherein the predefined schedule is scheduled by a base station, wherein the first signal burst and the second signal

burst comprise identical packets of a common message;  
the first and second antennas are sequentially enabled in accordance with  
the predefined schedule to communicate with a storage medium at the receiver;  
and  
enabling a representation of the single unified message by responding to  
the first and second signal bursts. (Emphasis added).

In one embodiment of the present disclosure, a method and system are for the reception of radio signals using a protocol assisted switched diversity antenna system. One aspect of the present disclosure is that the antennas are switched in response to packet bursts or signal bursts that are scheduled or ordered by time intervals. Namely, the antennas are switched in accordance with a predefined schedule, wherein the predefined schedule is scheduled by a base station, or receiving by wireless transceivers scheduled communications from a transceiver at a transmission station in accordance with a predefined schedule of a sequence of scheduled packet bursts, wherein the wireless transceivers are located at receiving stations having switched protocol diversity reception operational modes, wherein the predefined schedule is scheduled by the transmission station and wherein the first packet burst and the second packet burst comprise identical packets of a common message. Thus, the packet bursts are first scheduled and then sent to the receiver in accordance with that predefined schedule. Similarly, the switching of the antennas is also performed in accordance with the predefined schedule.

Furthermore, the independent claims recite the feature where a series of two signal bursts carrying exactly the same information is sent in accordance with the predefined schedule. In other words, both signal bursts carrying the same information are **pre-scheduled to be sent with the same information.** (See e.g., Specification, para. [0020]-[0021]).

Aizawa fails to anticipate independent claims 1, 5, 8 and 13 because Aizawa fails to describe or suggest the novel concept of switching between the first and second antennas in response to a predefined schedule of a sequence of scheduled packet bursts, wherein the predefined schedule is scheduled by a base station, or receiving by wireless transceivers scheduled communications from a transceiver at a transmission station in accordance with a predefined schedule of a sequence of scheduled packet

bursts, wherein the wireless transceivers are located at receiving stations having switched protocol diversity reception operational modes, wherein the predefined schedule is scheduled by the transmission station and wherein the first packet burst and the second packet burst comprise identical packets of a common message. Aizawa discloses that different packets of information A-D are transmitted. (See Aizawa, col. 3, ll. 4-6). In contrast, the claims specify that the transmitted packets the first packet burst and the second packet burst are identical packets of a common message.

Furthermore, Aizawa discloses that the preset transmission pattern transmits all data from each one of the four antennas at the same time. (See Aizawa, col. 4, ll. 5-24, emphasis added). The pattern simply changes the frequency at which each antenna transmits for each time period. (See *Id.*). In stark contrast, the present claims specify that the antennas transmit or receive identical packets of a common message sequentially. That is, identical packets are transmitted or received by each one of the antennas one at a time, one after the other. Therefore, independent claims 1, 5, 8 and 13 are clearly patentable and not anticipated by Aizawa.

Furthermore, dependent claims 4, 6, 7, 9-12 and 15-21 depend from claims 1, 5, 8 and 13, respectively, and recite additional limitations. As such, and for the exact same reason set forth above, claims 4, 6, 7, 9-12 and 15-21 are also patentable and not anticipated by Aizawa. As such, the rejection should be withdrawn.

## **II. REJECTION OF CLAIMS 2 AND 3 UNDER 35 U.S.C. § 103**

The Examiner has rejected claims 2 and 3 in the Office Action under 35 U.S.C. § 103 as being unpatentable over Aizawa in view of Aaronson, et al. (U.S. Patent No. 6,363,062, issued March 26, 2002, hereinafter referred to as "Aaronson"). The rejection is respectfully traversed.

The disclosure of Aizawa is discussed above. Aaronson discloses a communications protocol for packet data. A MAC layer schedules communication bursts taking into account factors such as propagation delay between the different nodes, queuing of data and synchronization of the time transmitting from multiple nodes. (See Aaronson, col. 3, ll. 22-30).

The Examiner's attention is directed to the fact that Aizawa and Aaronson, alone

or in any permissible combination, fail describe or suggest the novel concept of switching between the first and second antennas in response to a predefined schedule of a sequence of scheduled packet bursts, wherein the predefined schedule is scheduled by a base station, or transmitting a message contained within a plurality of packet bursts occurring at spaced time intervals, wherein a first packet burst and a second packet burst of the plurality of packet bursts comprise identical packets of a common message and wherein the first packet burst and the second packet burst comprise identical packets of a common message. As stated above, Aizawa simply does not describe or suggest the novel concept of switching between the first and second antennas in response to a predefined schedule of a sequence of scheduled packet bursts, wherein the predefined schedule is scheduled by a base station, or transmitting a message contained within a plurality of packet bursts occurring at spaced time intervals, wherein a first packet burst and a second packet burst of the plurality of packet bursts comprise identical packets of a common message and wherein the first packet burst and the second packet burst comprise identical packets of a common message.

Moreover, Aaronson fails to bridge the substantial gap left by Aizawa because Aaronson also fails to describe or suggest the novel concept of switching between the first and second antennas in response to a predefined schedule of a sequence of scheduled packet bursts, wherein the predefined schedule is scheduled by a base station, or transmitting a message contained within a plurality of packet bursts occurring at spaced time intervals, wherein a first packet burst and a second packet burst of the plurality of packet bursts comprise identical packets of a common message and wherein the first packet burst and the second packet burst comprise identical packets of a common message. Therefore, the combination of Aizawa and Aaronson fails to render obvious the independent claims.

In addition, dependent claims 2 and 3 depend from claim 1 and recite additional limitations. As such, and for the exact same reason set forth above, claims 2 and 3 are also not made obvious by Aizawa and Aaronson. As such, the rejection should be withdrawn.

### Conclusion

Thus, all of the claims now fully satisfy the requirements of 35 U.S.C. §§ 102 and 103. Consequently, all the claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues in any of the claims now pending in the application, it is requested that the Examiner telephone Mr. Kin-Wah Tong, Esq. at (732) 542-2280 x130 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,



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